

A marked-up version indicating the amendments made to the claims, as required by 37 C.F.R. § 1.121 (c)(1)(ii), is enclosed. These amendments add no new matter. Applicant reserves the right to pursue the canceled subject matter in a related continuing application.

Rejections under 35 U.S.C. § 102

Claim 22 stands rejected, under 35 U.S.C. § 102(a), as being anticipated by Halverson *et al.* (U.S. Patent No. 5,707,809); claims 22, 46, 47, 49, and 50 stand rejected, under 35 U.S.C. § 102(e), as being anticipated by Witney *et al.* (U.S. Patent No. 5,792,610), and claim 51 stands rejected, under 35 U.S.C. § 102(e), as being anticipated by Whiteley *et al.* (U.S. Patent No. 5,962,223). Although applicant does not agree with the present rejections, all of the pending claims have been amended, in the interest of expediting prosecution, to include the limitation that the probe is derived from a hemizygous cell. This limitation has been incorporated from claim 48, which the Examiner indicated would be allowable if rewritten in independent form. As none of the cited references disclose or suggest the use of probes from a hemizygous cell in sequence variance detection methods, the present claims should be allowed.

Conclusion

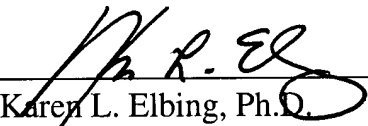
In summary, applicant submits that the claims are now in condition for allowance, and such action is respectfully requested.

Applicant notes that the Form PTO-1449 that was submitted with an Information Disclosure Statement filed on January 7, 2002 has not been initialed and returned, and hereby requests that it be initialed and returned with the next Office Action. Enclosed is a Petition to extend the period for replying to the Office Action for two months, to and including January 7, 2003, and a check in payment of the required extension fee.

If there are any charges, or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 7 January 2003



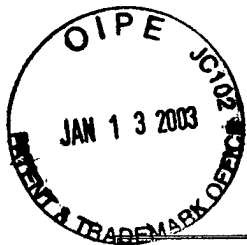
Karen L. Elbing, Ph.D.
Reg. No. 35,238

Clark & Elbing LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-428-0200
Facsimile: 617-428-7045
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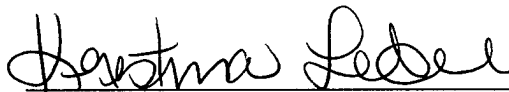


PATENT
ATTORNEY DOCKET NUMBER: 50038/020003

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|-------------|-------------------------------|---------------|---------------------|
| Applicant: | Vincent P. Stanton | Art Unit: | 1634 |
| Serial No.: | 10/040,721 | Examiner: | Arun K. Chakrabarti |
| Filed: | January 7, 2002 | Customer No.: | 21559 |
| Title: | PROBES FOR VARIANCE DETECTION | | |

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Version with Markings to Show Changes Made

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A marked-up version of claim 22 and new claim 52 is presented below.

22. (Amended) A method for analyzing a test nucleic acid sample to determine whether it contains a sequence variance, said method comprising the steps of:

- (a) obtaining a nucleic acid probe that is derived from a hemizygous cell and that is complementary to a sex chromosome or segment thereof;
- (b) forming a duplex between said test nucleic acid sample and said probe; and
- (c) analyzing whether said duplex contains a nucleotide mismatch, thereby determining whether said test nucleic acid sample contains a sequence variance.

52. (New) The method of claim 22, wherein said cell is a somatic cell hybrid that is formed from the fusion of a cell or chromosome to a recipient cell.